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**REMARKS**

Applicant respectfully requests entry of this Amendment and reconsideration of the pending claims. Claims 1-17, 19 and 21-29 are canceled. Claims 18 and 20 are amended. Accordingly, claims 18 and 20 are currently pending in the above-identified patent application.

Applicant hereby selects/elects Group II (claims 18-20) for prosecution on the merits. This confirms the oral selection/election made March 9, 2006. The remaining claims are hereby cancelled.

Claim 18 was rejected under 35 USC § 102 as anticipated by Gamo et al, by Sawa et al, and by Bradley et al. And, was further rejected under 35 USC § 103 as obvious in view of Bradley et al. Claim 18 is amended to include sodium (Na) and potassium (K). At least Gamo et al and Sawa et al do not disclose Na or K, and the Office Action does not rely on them to do so. With regard to Bradley et al. the Office Action does not explicitly call out K as being disclosed, and therefore not anticipate, the invention as defined in amended claim 18. And, while Bradley et al may disclose Na *vel non*, it only does so as a cryosorptive hydrogen system, discussed further hereinbelow, and not as the diffusion multiple defined in claim 18.

Accordingly, the remaining subject matter should be allowable over the cited reference for at least the reasons that not all of the elements are shown or reasonably taught in the reference, and that one of ordinary skill in the art could not reasonably expect (in the unexpected arts) the undisclosed materials to work. Applicant submits that claim 18 is allowable over the cited references. Notice to that effect is respectfully requested.

Claim 20 is amended to remove materials purportedly disclosed in Gamo et al and/or Sawa et al. With regard to claim 20, the Office Action states that a metal hydride is shown by Bradley et al either under 35 USC § 102, or under 35 USC § 103. However, Bradley et al distinguishes the inventive material from metal hydrides, and actually teaches away from their use. To wit:

“Metal hydrides also undesirably contaminate the hydrogen as it is released. Further, metal hydride storage is not energy-efficient in this

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context; the energy required to extract the hydrogen from the metal hydride is equivalent to nearly half the amount stored within it. Finally, the rate of heat transfer within metal hydrides is limited by the fact that they are solids, and are not able to benefit from the higher rate of heat transfer afforded by gas that exists in porous materials." (Column 1, lines 55 et seq)

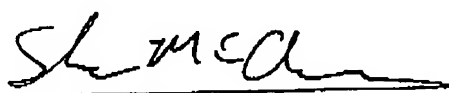
Bradley et al instead discloses and teaches a "cryosorptive hydrogen storage system" and requires pores and low temperatures to function. In at least three instances, a metal hydride source provides hydrogen to the disclosed material of Bradley et al, and clearly the metal hydride is not the disclosed material of Bradley et al. The metal hydride is mentioned, but the metal hydride is not the material comprising Li, B, C, N, Na, or Si disclosed by Bradley et al. Thus, Bradley et al neither discloses nor suggests that any of those elements are suitable for use in a metal hydride as defined in claim 20, whether those elements are alone or in combination.

Claims 18 and 20 are allowable over the cited reference for at least the reasons that not all of the elements are shown or reasonably taught in the reference, and that one of ordinary skill in the art could not reasonably expect (in the unexpected arts) the undisclosed materials to work. Notice to that effect is respectfully requested.

In view of the amendments, Applicant submits that the currently pending claims of the patent application are allowable over the cited references, and that the application is in condition for allowance. Accordingly, Applicant solicits allowance of the pending claims and movement of the present patent application on to issuance. If the Examiner has any questions regarding the present patent application, the Examiner can contact the below-signed counsel of Applicant at telephone number (518)-387-5448.

Respectfully submitted,

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